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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,259	02/11/2005	Mihoko Ohashi	Q86191	9908
23373 7590 05/06/2008 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037				
EXAMINER BERMAN, SUSAN W				
ART UNIT		PAPER NUMBER		
1796				
MAIL DATE		DELIVERY MODE		
05/06/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/524,259

Applicant(s)

OHASHI ET AL.

Examiner

/Susan W. Berman/

Art Unit

1796

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 28-31 is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-27 and 32-39 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04-04-2008 has been entered.

Response to Arguments

Applicant argues that the fluorine-containing polymer disclosed by Araki et al '215 is not cured because the functional group, such as an epoxy group, is essential for exhibiting adhesive strength. It appears from the Examples that the functional group-containing fluorine polymer is applied as a primer and cured by heat. Applicant's claims 1-8 and 10-13 are also drawn to an uncured composition. The reason for adding a photoacid generator to the composition disclosed by Araki et al '215 is that the fluorinated polymer can then be cured with light, as taught by Feiring et al. The argument that the composition of Araki et al would be rendered unsatisfactory for its intended purpose is not persuasive because the intended purpose of coating a substrate is not considered to be rendered unsatisfactory by addition of a photoacid generating initiator that allows for photocuring on a substrate. Claims 14-27 and 32-39 are drawn to cured products obtained by curing the composition of claim 1. There is no evidence of record to show that the products obtained from the instantly claimed compositions containing a photoacid generator are unexpectedly different from the cured products obtained from the fluorine-containing and epoxy group-containing polymers taught by Araki et al '215. The cured fluorine-containing and epoxy

group-containing polymers would be expected to have the same structure and properties since the photoacid generator is an initiator and not a curable component of the composition.

The comparative data in the Declaration under 37 CFR § 1.132 of Takayuki Araki filed 04-04-2008 has been considered but is found unpersuasive for the following reason. The Declaration compares a composition and cured product taught by Feiring et al to a composition and cured product according to the instant claims. However, the rejection of record cites Araki et al '215 as the primary reference that teaches a fluorine-containing polymer having an epoxy functional group. Feiring et al is relied upon as a secondary reference teaching that such a polymer can be photocured in the presence of a photoacid generating initiator. Therefor the data in the Declaration does not address the issue set forth in the rejection of claims over Araki et al in view of Feiring et al. The issue is whether applicant obtains significant and unexpected results for compositions comprising the fluorinated polymer taught by Araki et al and a photoacid generator as taught by Feiring et al. Furthermore, even if Feiring et al were considered the closest prior art, the polymer employed in the Declaration does not contain epoxy functional groups taught by Feiring et al and is, therefore, also not representative of the closest teaching of Feiring et al with respect to the instant claims.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-8, 10-27 and 32-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Araki et al (6,069,215) in view of Feiring et al (6,790,587). Araki et al '215 disclose

materials for coating compositions comprising a fluorine-containing polymer derived from fluorine-containing monomers having functional groups, such as epoxy groups (column 3, line 43, to column 4, line 8, column 6, lines 18-64, column 8, lines 8-10 and 25-36). Monomer (M2) in instant claim 3 is taught in column 7, formula (2). Monomer (M3) in instant claim 4 is taught in column 7, formula (5). Use for optical parts is taught in column 24, lines 59-67. Araki et al '215 does not mention adding a photoacid generator.

Feiring et al teach adding a photoacid generator to an analogous fluorinated polymer to provide acid upon exposure to radiation that causes deprotection and production of hydrophilic acid groups in the fluorinated polymer to facilitate development under aqueous conditions. It would have been obvious to one skilled in the art at the time of the invention to add a photoacid generator to the fluorinated polymer compositions disclosed by Araki et al, as taught by Feiring et al in analogous art. One skilled in the art at the time of the invention would have been motivated by a reasonable expectation of providing acid upon exposure to radiation that causes deprotection and production of hydrophilic acid groups in the fluorinated polymer to facilitate development under aqueous conditions, as taught by Feiring et al.

Allowable Subject Matter

Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 28-31 are allowed.

The prior art does not teach fluorinated polymers having pendant groups as defined in the instant claims wherein the cyclic ether structure is an oxetane structure.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Susan W. Berman/ whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SB
5/5/2008

/Susan W Berman/
Primary Examiner
Art Unit 1796

Application Number**Application/Control No.**

10/524,259

Examiner

/Susan W. Berman/

**Applicant(s)/Patent under
Reexamination**

OHASHI ET AL.

Art Unit

1796